

L Number	Hits	Search Text	DB	Time stamp
1	177311	(current same coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 15:29
2	6187	((current same coil) ) and diaphragm	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 15:29
3	575	((((current same coil) ) and diaphragm) and ferromagnet\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 15:30
4	164	(((((current same coil) ) and diaphragm) and ferromagnet\$4) and (ferromagnet\$4 same diaphragm)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:27
5	8	6,349,374.pn. or 5,185,549.pn. or 6,475,658.pn. or 5,607,292.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 15:46
6	8	6,349,374.pn. or 5,185,549.pn. or 6,475,658.pn. or 5,607,292.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 15:46
7	7054	"diaphragm pump"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:27
8	2069	"diaphragm pump" and (current saim coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:27
9	838	("diaphragm pump" and (current saim coil)) and (diaphragm same air)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:28
10	32	((("diaphragm pump" and (current saim coil)) and (diaphragm same air)) and ferromagnet\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:28
11	23	((("diaphragm pump" and (current saim coil)) and (diaphragm same air)) and ferromagnet\$4) not (((((current same coil) ) and diaphragm) and ferromagnet\$4) and (ferromagnet\$4 same diaphragm))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:34
12	117155	((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:37
13	72092	((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:36
14	33255	((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:36
15	3845	(((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:37

16	396	(((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)) and diaphragm	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:37
17	263	(((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)) and diaphragm) and (diaphragm same coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:38
18	202	(((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)) and diaphragm) and (diaphragm same coil)) and (diaphragm same current)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:38
19	195	((((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)) and diaphragm) and (diaphragm same coil)) and (diaphragm same current)) not (((current same coil) ) and diaphragm) and ferromagnet\$4) and (ferromagnet\$4 same diaphragm))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:38
20	195	((((((current same coil) ) and (actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (coil adj5 current)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 air)) and diaphragm) and (diaphragm same coil)) and (diaphragm same current)) not (((current same coil) ) and diaphragm) and ferromagnet\$4) and (ferromagnet\$4 same diaphragm)) not (((("diaphragm pump" and (current same coil)) and (diaphragm same air)) and ferromagnet\$4) not (((current same coil) ) and diaphragm) and ferromagnet\$4) and (ferromagnet\$4 same diaphragm)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:38

L Number	Hits	Search Text	DB	Time stamp
1	186479	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
2	8044	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
3	3956	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
4	1278	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:42
5	1278	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:43
6	298	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and (battery or cell)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:43
7	155	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and (battery or cell) and ((battery or cell) same (ferromagnet\$5 or magnet\$5 or bellow or electromagnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:46
8	602365	battery or "fuel cell"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:47
9	59690	(battery or "fuel cell") and coil	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:47
10	12870	((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:48
11	2779	((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50

12	477	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50
13	435	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50
14	55	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") same (mover or oscillator or diaphragm)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:51
15	51	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") same (mover or oscillator or diaphragm))) not (((((((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and diaphragm) and (current same coil)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (battery or cell)) and ((battery or cell) same (ferromagnet\$5 or magnet\$5 or bellow or electromagnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:52

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1	186479	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
2	8044	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
3	3956	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:41
4	1278	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:42
5	1278	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:43
6	298	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and (battery or cell)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 17:43
7	155	((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and diaphragm) and (current same coil) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil) and (battery or cell) and ((battery or cell) same (ferromagnet\$5 or magnet\$5 or bellow or electromagnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:46
8	602365	battery or "fuel cell"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:47
9	59690	(battery or "fuel cell") and coil	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:47
10	12870	((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:48
11	2779	((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50

12	477	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50
13	435	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:50
14	55	(((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") same (mover or oscillator or diaphragm)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:51
15	51	((((((battery or "fuel cell") and coil) and ((battery or "fuel cell" or "electrochemical cell") same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") adj9 (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (air same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and (coil\$2 same (ferromagnet\$5 or electromagnet\$5 or magnet\$5))) and ((battery or "fuel cell" or "electrochemical cell") same (mover or oscillator or diaphragm))) not (((((((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and diaphragm) and (current same coil)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 diaphragm)) and ((actuator or bellow or "air pump" or magnet\$5 or electromagnet\$5) adj8 coil)) and (battery or cell)) and ((battery or cell) same (ferromagnet\$5 or magnet\$5 or bellow or electromagnet\$5)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/06/04 18:52